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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/401,070	09/22/1999	ARTHUR ANDERSON	3876	4148

32681 7590 10/03/2006

PLANTRONICS, INC.  
345 ENCINAL STREET  
P.O. BOX 635  
SANTA CRUZ, CA 95060-0635

EXAMINER

RYMAN, DANIEL J

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/401,070

Applicant(s)

ANDERSON ET AL

Examiner

Daniel J. Ryman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-54 and 56-79 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 9, 10, 14-16, 21, 22, 26-40, 43, 49, 51-54, 56-63, 66, 67, 69-71, 75 and 76 is/are rejected.
- 7) ☒ Claim(s) 1, 3-8, 11-13, 15, 17-20, 23-26, 33, 40-42, 44-48, 50, 51, 63-65, 68-70, 72-75 and 77-79 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's arguments filed 24 August 2006 have been fully considered but they are not persuasive with respect to claims 1, 15, 26, 33, 40, 51, and 70.
2. On page 15 of the Response, Applicant asserts that claim 51 is "amended to positively recite a headset adapter (or headset adapter base) that implements [the packet.]" While Applicant has included an adapter base within claim 51, Applicant has failed to relate the adapter base with the data packet. As such, claim 51 currently recites two distinct items, namely, a headset adapter base and a data packet per se, so that claim 51 continues to claims non-statutory subject matter.
3. On page 15 of the Response, Applicant asserts that claim 1 "is amended to positively recite independent and direct control and/or monitoring by the headset adapter." Examiner, respectfully, disagrees that the claim currently requires that the system include an accessory that is independently and directly controlled and/or monitored by the headset adapter. Applicant has amended claim 1 to recite "an accessory for the telephone headset configured to be coupled to the accessory interface bus of the adapter wherein the accessory is independently and directly controlled and monitored by the headset adapter when the headset accessory is in communication with the headset adapter." As outlined in the Office Action mailed 17 February 2006, "configured to" is language that makes optional, but does not require, the subsequent limitation. Thus, as currently amended, claim 1 only requires that the system include an accessory for the telephone headset that is capable of coupling to the accessory interface bus. Since the accessory is not required to actually couple to the bus, and thus be "in communication with the headset adapter," the accessory is also not required to be "independently and directly controlled and

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monitored by the headset adapter.” As such, contrary to Applicant’s assertion, claim 1 has not been “amended to positively recite independent and direct control and/or monitoring by the headset adapter.”

4. On page 15 of the Response, Applicant asserts that claim 15 “is amended to positively recite independent and direct control and/or monitoring by the headset adapter.” Examiner, respectfully, disagrees that the claim currently requires that the system include an accessory that is independently and directly controlled and/or monitored by the headset adapter. Applicant has amended claim 15 to recite “the accessory being configured to be coupled to the interface bus, wherein the microcontroller independently and directly controls and monitors the accessory when the accessory is in communication with the micro-controller.” As outlined in the Office Action mailed 17 February 2006, “configured to” is language that makes optional, but does not require, the subsequent limitation. Thus, as currently amended, claim 15 only requires an accessory for the telephone headset that is capable of coupling to the accessory interface bus. Since the accessory is not required to actually couple to the bus, and thus be “in communication with the micro-controller,” the accessory is also not required to be “independently and directly control[led] and monitor[ed] by the headset adapter.” As such, contrary to Applicant’s assertion, claim 15 has not been “amended to positively recite independent and direct control and/or monitoring by the headset adapter.”

5. On page 15 of the Response, Applicant asserts that claim 26 “is amended to positively recite independent and direct control and/or monitoring by the headset adapter.” Examiner, respectfully, disagrees that these claims currently requires that the system include an accessory that is independently and directly controlled and/or monitored by the headset adapter. Claim 26

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currently recites: “the telephone headset accessories interface bus being further configured to transmit and receive a plurality of communications packets between the telephone headset accessory and the headset adapter for directly and independently controlling and monitoring the telephone headset accessory by the headset adapter.” As outlined in the Office Action mailed 17 February 2006, “configured to” is language that makes optional, but does not require, the subsequent limitation. Thus, as currently amended, claim 26 only requires the bus to be capable of transmitting packets, where the packets are used for direct and independent control and monitoring. Since the bus is not required to actually transmit such packets, contrary to Applicant’s assertion, claim 26 has not been “amended to positively recite independent and direct control and/or monitoring by the headset adapter.” In addition, Examiner notes that claim 26 is replete with “intended use” language, where such language, as outlined in the Office Action mailed 17 February 2006, does not require the subsequent limitation. When such intended use language is stripped from the claim, it appears that claim 26 only requires “a telephone headset accessories interface bus,” i.e. the majority of the claim appears to be intended use limitations.

6. On page 15 of the Response, Applicant asserts that claim 33 “is amended to positively recite independent and direct control and/or monitoring by the headset adapter.” Examiner, respectfully, disagrees that these claims currently requires that the system include an accessory that is independently and directly controlled and/or monitored by the headset adapter. Claim 33 currently recites: “the interface bus enabling the headset adapter to independently and directly control, monitor, and test the headset accessory when the headset accessory is in communication with the headset adapter via the interface bus.” Thus, claim 33 never actually requires that the headset adapter be in communication with the headset accessory. As such, contrary to

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Applicant's assertion, claim 15 has not been "amended to positively recite independent and direct control and/or monitoring by the headset adapter." In addition, Examiner notes that claim 33 is replete with "intended use" language, where such language, as outlined in the Office Action mailed 17 February 2006, does not require the subsequent limitation. When such intended use language is stripped from the claim, it appears that claim 33 only requires "an interface bus that carries a plurality of communications between a headset adapter and a headset accessory . . . , the headset adapter being configured to be connected to a base telephone," i.e. the majority of the claim appears to be intended use limitations

7. On page 15 of the Response, Applicant asserts that claim 40 "is amended to positively recite independent and direct control and/or monitoring by the headset adapter." Examiner, respectfully, disagrees that the claim currently requires that the system include an accessory that is independently and directly controlled and/or monitored by the headset adapter. Applicant has amended claim 40 to recite "transmitting a command or status request signal from the headset adapter base over the interface bus and to the accessory . . . to enable the headset adapter base to independently and directly control and monitor the operation of the accessory." Merely "enabling" the headset adapter base to do a task is not equivalent to requiring the headset adapter base to do the task. Simply, by "enabling" the headset adapter base "to independently and directly control and monitor the operation of the accessory," Applicant has not required that the headset adapter base actually perform this independent and direct controlling and monitoring. As such, contrary to Applicant's assertion, claim 40 has not been "amended to positively recite independent and direct control and/or monitoring by the headset adapter."

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8. On page 15 of the Response, Applicant asserts that claim 70 “ is amended to positively recite independent and direct control and/or monitoring by the headset adapter.” Examiner, respectfully, disagrees that these claims currently requires that the system include an accessory that is independently and directly controlled and/or monitored by the headset adapter. Simply, claim 70 suffers from the same problems as claim 33 since the claim never requires the headset accessory to be couple to the micro-controller.

9. With respect to claim 75, Examiner notes that, upon further consideration, Endick appears to disclose independently and directly signaling the options, col. 9, lines 54-66, where “the synchronization message is not sent from to the PBX, as it only has meaning to the base digital telephone and options,” such that the options are independently and directly controlled and monitored by the micro-controller, col. 9, line 67-col. 10, line 5. As such, Examiner asserts that Endick renders obvious claim 75, as currently amended.

#### ***Claim Objections***

10. Claim 1 is objected to because of the following informalities: in line 3, “adapter configured to be coupled” should be “adapter coupled”; in line 5, “adapter being configured to be coupled” should be “adapter coupled”; and in line 6, “headset configured to be coupled” should be “headset coupled”. Appropriate correction is required.

11. Claim 3 is objected to because of the following informalities: in lines 1-2, “bus further includes” should be “bus includes,” since the bus was not previously recited as including a feature, and, in line 5, “receiving communications” should be “receiving the communications”. Appropriate correction is required.

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12. Claim 15 is objected to because of the following informalities: in lines 5-6, “the accessory being configured to be coupled” should be “the at least one accessory coupled”; in line 7, “the accessory” should be “the at least one accessory”; in line 8, “the accessory” should be “the at least one accessory”; and in line 10, “base being configured to be coupled” should be “base coupled”. Appropriate correction is required.

13. Claim 26 is objected to because of the following informalities: in line 3, “bus being configured to enable” should be “bus enabling”; in line 5, “monitor” should be “monitoring”; and in lines 7-8, “bus being further configured to transmit and receive” should be “bus further transmitting and receiving”. Appropriate correction is required.

14. Claim 33 is objected to because of the following informalities: in line 5, “adapter configured to be connected” should be “adapter connected”. Appropriate correction is required.

15. Claim 40 is objected to because of the following informalities: in line 8, “adapter configured to be connected” should be “adapter connected”. Appropriate correction is required.

16. Claim 45 is objected to because of the following informalities: claim 45 depends upon itself. Appropriate correction is required.

17. Claim 51 is objected to because of the following informalities: in line 4, “accessory being configured to correspond” should be “accessory corresponding”. Appropriate correction is required.

18. Claim 63 is objected to because of the following informalities: in line 2, “bus configured to have” should be “bus having”. Appropriate correction is required.



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19. Claim 68 is objected to because of the following informalities: in line 2, “communications protocol further comprises” should be “communications further comprises a packet, where the packet comprises:”. Appropriate correction is required.

20. Claim 69 is objected to because of the following informalities: in line 2, “communications protocol further comprises” should be “communications further comprises a packet, where the packet comprises:”. Appropriate correction is required.

21. Claim 70 is objected to because of the following informalities: in line 4, “adapted to be coupled” should be “coupled” and, in line 9, “base being configured to be coupled” should be “base coupled”. Appropriate correction is required.

22. Claim 75 is objected to because of the following informalities: in line 7, “base being configured to be coupled” should be “base coupled”. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

23. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

24. Claims 51-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 51 recites the limitation "the packet" in line 5. There is insufficient antecedent basis for this limitation in the claim. As currently amended, claim 51 is directed to “a headset adapter for communicating with a headset accessory via an accessory interface bus” and a “data packet.” The claim does not relate these two items, such that it is unclear whether “the data packet” should have antecedent basis included earlier in the claim or whether “the data packet” should be “a data packet.”

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25. Claims 56-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 56 currently recites: “a plurality of commands to independently and directly control, monitor, or identify.” It is unclear whether this phrase should be interpreted as “a plurality of commands to independently and directly perform control, monitoring, or identification of,” such that the term “independently and directly” modifies each of “control, monitoring, and identification,” or whether “independently and directly” modifies the term “control” only. Given the nature of Applicant’s arguments, it appears that “directly and independently” should modify each of “control, monitoring, and identification.” However, dependent claims 57-62, which modify the term “a plurality of commands” by specifying certain types of commands, recite commands that would not allow for “direct and independent” control, monitoring, and identification. For example, claim 60 requires “a command for turning the specific accessory on or off.” Such a command is presumably sent in response to a user requiring the use of or terminating the use of an accessory. As such, the command is not “independent” since it is dependent upon an outside source, namely the user. Since Examiner is unsure how claim 56 should be interpreted, Examiner will not review claims 56-62 for the purposes of prior art rejections.

***Claim Rejections - 35 USC § 101***

26. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

27. Claims 51-54 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 51-54 are directed to a data packet per se in addition to “a

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headset adapter for communicating with a headset accessory.” These two items have not been related by the claim, such that, as currently amended, the claim is directed to two distinct intentions, one of which is a data packet per se. Since the data packet is merely energy, the packet does not fall within one of the four statutory classes consisting of a process, a machine, a manufacture, and a composition of matter. Specifically, the claimed signal is not a process because it does not define a series of steps. See MPEP § 2106(IV)(B)(2)(b). In addition, the claimed signal is not a machine, a manufacture, or a composition of matter since the claimed signal has no physical structure. See MPEP § 2106(IV)(B)(2)(a). As such, the claimed data packet is not statutory subject matter. Examiner will not examine the claims with respect to 35 U.S.C. §§ 102 and 103, but rather Examiner will rely on the rejections made in previous Office Actions to indicate to Applicant the state of the prior art.

***Claim Rejections - 35 USC § 103***

28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

29. Claim 1-3, 14-16, 26-40, 63, 66, 67, 70, 71, 75, and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endick et al (USPN 5,339,360), of record, in view of Applicant's admitted prior art.

30. Regarding claims 1, 14, 15, 26, 28-39, 63, 66, 70, and 75, Endick discloses a telecommunication system comprising: a telephone handset (ref. 106 and col. 3, lines 4-13); an accessory adapter (option bus and microcontroller) configured to be coupled to the telephone

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handset and having an accessory interface bus (option bus) for transmitting and receiving communications packets, the adapter being configured to be coupled to a base telephone (Figs. 1, 4, and 5; col. 3, lines 4-14; col. 3, line 58-col. 4, line 10; and col. 4, lines 20-38) where the accessories include a headset attachment (col. 3, lines 66-68); a micro-controller coupled to the interface bus (ref. 118; col. 3, lines 27-36; and col. 5, lines 22-42), for controlling and monitoring at least one accessory to the telecommunications headset which is coupled to the interface bus (col. 3, lines 27-36 and col. 5, lines 22-42), wherein the micro-controller controls and monitors the accessory through the bi-directional transmission of communications packets between the micro-controller and the accessory via the interface bus (col. 3, lines 27-36 and col. 5, lines 22-42) with one purpose being to test the accessory and verify proper operation of the accessory (col. 8, lines 7-10); and an accessory for the telephone configured to be coupled to the accessory interface bus of the headset adapter, wherein the accessory is independently and directly controlled and monitored by the headset adapter when the accessory is in communication with the headset adapter via the transmission of communications packets between the accessory and the headset adapter over the accessory interface bus (col. 9, lines 54-66) where “the synchronization message is not sent from to the PBX, as it only has meaning to the base digital telephone and options,” such that the options are independently and directly controlled and monitored by the micro-controller (col. 9, line 67-col. 10, line 5).

Endick does not disclose that the telecommunication system comprises a telephone headset and a headset adapter coupled to the telephone headset and having an accessory interface bus. However, Endick does disclose having an accessory interface bus (Fig. 4; col. 3, lines 4-14; col. 3, line 58-col. 4, line 10; and col. 4, lines 20-38). This bus is part of an accessory adapter

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where the accessory adapter is broadly defined to be a system which interfaces a phone system to accessories. Endick also discloses that these accessories can include a telephone headset (col. 3, lines 66-68). It would have been obvious to one of ordinary skill in the art to have the telecommunication system comprise a telephone headset and a headset adapter where the headset adapter is broadly defined to be the accessory adapter since it is known in the art to include a telephone headset as an accessory item in order to allow a user of the telecommunication system to use the headset.

Additionally, Endick does not expressly disclose that the accessories are headset accessories since Endick only expressly discloses accessories for the base telephone. However, Endick does leave open the possibility for the accessories to be headset accessories by disclosing that the accessories are not limited to the aforementioned accessories for the base telephone (col. 3, line 66-col. 4, line 2). Applicant admits that accessories for a telephone headset are well known as prior art (page 1, line 13-page 2, line 21) where the accessories are used to add functionality to or ease the use of a telephone headset. It is also very old and well known in the art to use buses to communicate between devices connected to the bus, and thus it would have been obvious to one of ordinary skill in the art at the time of the invention that the bus could be used to add accessories to another accessory. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the accessories include accessories for the telephone headset since accessories to telephone headsets are very well known as a means to add functionality to or ease the use of a telephone headset.

Regarding claims 26 and 28-39, Examiner notes that the dependent claims and many claim limitations with claims 26 and 33 are "intended use" limitations and therefore carry no

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patentable weight. For example, requiring a bus to carry a specific form of packet is an intended use limitation since the type of packet that the bus carries does not structurally define the bus. As such, since the cited dependent claims carry no patentable weight, Examiner has not included a separate rejection for these claims.

31. Regarding claims 2, 71, and 76, Endick in view of Applicant's admitted prior art discloses that the accessory interface bus includes at least one bi-directional signaling line for transmitting and receiving the communications packets between the accessory and the headset adapter in order to control and monitor the accessory (Endick: col. 8, lines 15-29).

32. Regarding claims 3, 16, and 27, Endick in view of Applicant's admitted prior art discloses that the accessory interface bus further includes: a power bus containing lines for +/- 5V and +/-VAUX (Endick: col. 3, lines 58-60 and col. 5, lines 43-48) where the +5V and +VAUX is broadly defined as a high voltage rail and the -5V and -VAUX is broadly defined as a low voltage rail; and at least one bi-directional signaling line for transmitting and receiving communications packets between the accessory and the headset adapter in order to control and monitor the accessory (Endick: col. 8, lines 15-29).

33. Regarding claim 40, Endick discloses a method for controlling or monitoring an accessory to a telephone using an accessory adapter base and an interface bus, the method comprising: detecting whether an accessory is coupled to the interface bus (polling) (Endick: col. 8, lines 15-29); and transmitting a command or status request signal from the headset adapter base over the interface bus and to the accessory detected as being coupled to the interface bus to enable the headset adapter base to independently and directly control and monitor the operation

of the accessory (Endick: col. 9, lines 54-66), the headset adapter being configured to be connected to a base telephone (Endick: col. 6, lines 47-64 and col. 8, line 15-col. 9, line 36 ).

Endick does not disclose that the telecommunication system comprises a telephone headset and a headset adapter coupled to the telephone headset and having an accessory interface bus. However, Endick does disclose having an accessory interface bus (Fig. 4; col. 3, lines 4-14; col. 3, line 58-col. 4, line 10; and col. 4, lines 20-38). This bus is part of an accessory adapter where the accessory adapter is broadly defined to be a system which interfaces a phone system to accessories. Endick also discloses that these accessories can include a telephone headset (col. 3, lines 66-68). It would have been obvious to one of ordinary skill in the art to have the telecommunication system comprise a telephone headset and a headset adapter where the headset adapter is broadly defined to be the accessory adapter since it is known in the art to include a telephone headset as an accessory item in order to allow a user of the telecommunication system to use the headset.

Additionally, Endick does not expressly disclose that the accessories are headset accessories since Endick only expressly discloses accessories for the base telephone. However, Endick does leave open the possibility for the accessories to be headset accessories by disclosing that the accessories are not limited to the aforementioned accessories for the base telephone (col. 3, line 66-col. 4, line 2). Applicant admits that accessories for a telephone headset are well known as prior art (page 1, line 13-page 2, line 21) where the accessories are used to add functionality to or ease the use of a telephone headset. It is also very old and well known in the art to use buses to communicate between devices connected to the bus, and thus it would have been obvious to one of ordinary skill in the art at the time of the invention that the bus could be

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used to add accessories to another accessory. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the accessories include accessories for the telephone headset since accessories to telephone headsets are very well known as a means to add functionality to or ease the use of a telephone headset.

34. Regarding claim 67, Endick in view of Applicant's admitted prior art discloses that the at least one command includes a command for resetting the accessory (Endick: col. 8, lines 59-61).

35. Claims 9, 10, 21, 22, 43, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endick et al (USPN 5,339,360) in view of Applicant's admitted prior art as applied to claims 1, 40, and 66 above, and further in view of Waechter et al (USPN 4,943,963).

36. Regarding claims 9 and 21, Endick in view of Applicant's admitted prior art discloses that a slave select line is used to address a packet to an accessory (col. 5, lines 33-35) and that each option contains an ID (address) (col. 8, lines 44-46). Endick in view of Applicant's admitted prior art does not disclose that the communication packet includes a source address indicating a bus address of the source of the communications packet and a destination address indicating a bus address of the destination of the communications packet; however, using addresses to identify a source and a destination is well known in the art. For instance, Waechter discloses, in a bi-directional bus communication system, the use of a source address for indicating the source of the packet and a destination address for indicating the destination of the packet (col. 5, lines 21-53). It would have been obvious to one of ordinary skill in the art of communications to include a destination address in order to indicate for which unit the packet is destined and a source address in order to indicate from which unit the packet originated since such addressing is well-known in the art and would allow the elimination of slave select lines



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within Endick in view of Applicant's admitted prior art's system. In further regards to claim 30, it is generally considered to be within the ordinary skill in the art to adjust, vary, select, or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The burden of showing criticality is on applicant. In re Mason, 87 F.2d 370, 32 USPQ 242 (CCPA 1937); Marconi Wireless Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955); In re Saether, 492 F.2d 849, 181 USPQ 36 (CCPA 1974); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). The length of the destination address is not deemed essential to the operation of the disclosed interface bus, and so it would be obvious to have the address be any length including a byte.

37. Regarding claims 10, 22, 43, and 69, Endick in view of Applicant's admitted prior art in further view of Waechter discloses that the communications packet further includes a checksum for detecting errors in the transmission of the communications packet (Waechter: col. 5, lines 25-45).

38. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Endick et al (USPN 5,339,360), of record, in view of Applicant's admitted prior art as applied to claim 40 above, and further in view of Miesterfeld et al (USPN 4,706,082), of record.

39. Regarding claim 49, Endick in view of Applicant's admitted prior art does not disclose that the synch pulse holds the accessory bus at a predetermined level for a predetermined amount of time before the rate bit of the communications packet is transmitted over the accessory bus thereby preventing collision between communications packets. Miesterfeld discloses, in a system

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using a serial data bus, having in every packet start bits, which are used by a detector to determine if another transmitter has started to transmit almost simultaneously, so that collisions due to an almost simultaneous transmission are avoided (col. 5, lines 23-39). These start bits occur at the beginning of the message and it would be obvious to include the start bits in the synch pulse which also comes at the beginning of the message. Also because the start bits are used to indicate a beginning of a message and aid in determining if there is a collision, it would be obvious to locate the start bits before the rate bit, which is an important part of the message and so should be sent only after it is determined that the bus is clear. Thus it would have been obvious to one of ordinary skill in the art of communications to have the synch pulse hold the bus at a predetermined level (have start bits) for a predetermined amount of time before the rate bit of the communications packet is transmitted over the accessory bus thereby preventing collision between communications packets.

***Allowable Subject Matter***

40. Claims 4-8, 17-20, 41, 42, 44-48, 50, 64, 65, 68, 72-74, and 77-79 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not disclose or fairly suggest having a single bit *in each packet* that defines the transmission rate of the packet.

41. Claims 11-13 and 23-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not disclose or fairly suggest including in each bit of the packet of Endick a first signal portion having a first logic level and a second

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signal portion having a second logic level where the value of the bit is assigned based upon a duration of either the first signal portion or the second signal portion. Simply, since Endick provides synchronization through a synch line (col. 4, lines 30-32), one of ordinary skill in the art would not have been motivated to replace the simple mechanism of the synch line of Endick with the complex mechanism for achieving a self-clocking signal disclosed in Jones et al. (USPN 5,10,611), as outlined in the previous rejections, to arrive at a system that judges the value of a bit by determining the duration of either a first signal portion or a second signal portion, which results in a self-clocking signal.

### *Conclusion*

42. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

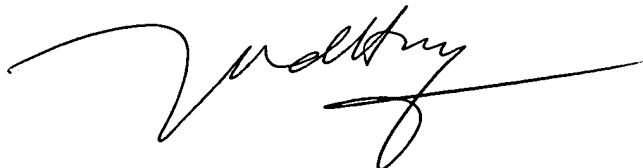
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel J. Ryman  
Examiner  
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*DJR*

A handwritten signature in black ink, appearing to read 'Huy Vu', with a long horizontal stroke extending to the right.

**HUY D. VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600**